CENTRE NATIONAL D'ÉTUDES SPATIALES

43rd ARGOS OPSCOM

New London, USA
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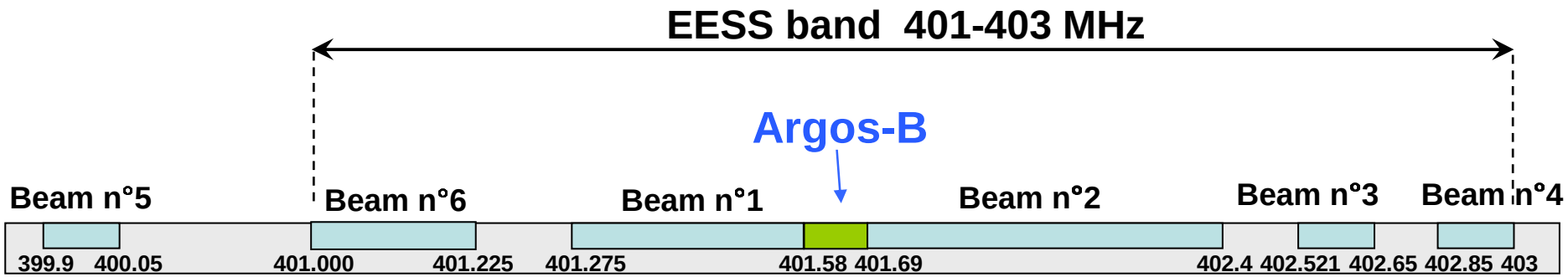
E41 – Frequency Coordination

The Argos-4 filing (uplink)

- Advanced Publication at ITU on 18 Sept 2007 (validity until 18 Sept 2014)
- API/A/4703 from IFIC 2603
- From January 208 to March 2009 : several coordination meetings through CGMS (mainly), SFCG and ITU-R.
- Main issue with CMA (Chinese Meteorological Administration) and sharing of band 401.1 to 401.4 MHz between FY-2 / FY-4 (chinese Geosat) and Argos-4 (Leosat)
  Agreement found on January 16, 2009 in Beijing : limitation for Argos platforms in term of EIRP (500 mWatt) and number (< 2000 platforms within the geo sat visibility circle)
- Coordination completed in Geneva on February 17, 2009.

The Argos-4 filing (uplink)



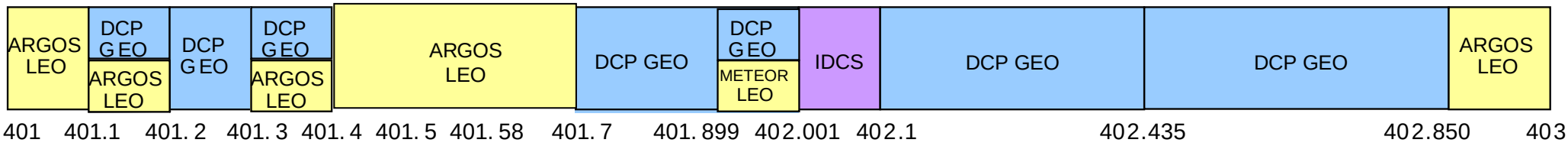
Beams 1, 5, 6
Current Argos-4 beams
Coordination OK

Beam 2 and 3
Coordination KO

Beam 4
Coordination OK
Not used for Argos-4

Conclusion of CGMS (meeting in Geneva : 17 Feb 09)

Basic general partitioning of the band 401 – 403 MHz for future long-term coordinated use of DCS systems on geostationary and non-geostationary MetSat and EESS systems



Argos-4 LEO in EESS Band
401.0 to 401.7 MHz
(except 401.1 to 401.2 MHz

Conclusion of CGMS (meeting in Geneva : 17 Jan 09)

- Band 401.0 -401.1 and 401.4-401.7 MHz
  - Reserved for Argos LEO
  - Baseline for Argos-4 instrument
- Band 401.1-401.2 and 401.3-401.4 MHz
  - Agreement between CMA (FY-2 and FY-4 Geo) and CNES (Argos Leo)
  - CNES to limit deployment of 1000 platforms within the FY-2 visibility circle in each sub-band
  - Argos Platform EIRP < 3 Watt
  - Baseline for Argos-4 instrument
- Band 401.7 – 402.435 MHz
  - Reserved for DCS on Geostationary METSAT
  - Metor (LEO) limited to russian territory withn 401.9-402.0 MHz
- Band 402.435-402.850 MHz
  - Reserved for extension of DCS on Geostationary METSAT
  - Band 402.585-402.685 MHz pre-allocated to Argos-GEO (use of Geo DCP repeaters : test succesfully performed through MSG-2 repaeater)
- Band 402.85-403.0 MHz
  - Reserved for Argos LEO (but not in baseline for Argos-4 instrument)

Argos-4 : downlink issues

- Problem of Authorization raised during NOAA-N' commissioning
- AICC asks FCC to stop Argos transmission (potential interference of Argos downlink with Alarm Centrals)
- Limited periods of TX switch-on given by FCC for NOAA-N' : no interference identified but tests disturbed by Argos downlink anomaly
- Today, no statement, what could happen after August 11 ?
- Big impact on Argos-3 system then on Argos-4 system : ascending compatibility, platforms receivers, etc….
- Baseline stays with 465.9875 MHz (FCC statement to be done)
- Back-up at 468.8745 MHz or other frequency to be defined (considered by CNES and NOAA frequency managers)
- Argos-4 filing to be upgraded (only 465.9875 in current filing)
- No identified back-up outside 460-470 MHz band